before its a separate principle of life in every-distinct portion, and she could not well be served-deven it broken into two or three pieces, since the fragments, like those of a divided worm, would be alte the sustain an undependent existence.

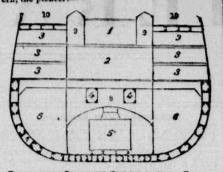
A better idea perhaps of the interior of the ship can begained at the present moment than when she has pregressed further towards completion. As you therefore the mighty deck, flush from stem to stem, the great compartments made by the transverse and longitudinal bulkheads, or parti-walls of iron, appear in the shape of a series of parallelograms, sixty feet in length by thirty-six in width; numerous doors in the walls of these yawning openings at once reveal that it is here that the hotels of the stemaning will be located. If we were to take the row of homes belonging to Mr. Mivart and drop them down one rull, take "Farrance's and drop it down the second, ake Moriey's at Charing Cross and fit it into a third, and adjust the Great Western Hotel at Paddington and the Great Northern at King's Cross into specimes four and five, we should get some familidea of the nature of the accommodation. The Great Eastern "will edond. We speak of dropping hotels down these holes, became the separate compartments will be as distinct from each other as so many different houses; each will have its splendid saloons, upper and lower, of 60 feet in length: its bedroons or cabins, its kitchen and its bar; and the passengers will no more be able to walk from the one than the inhabitants of one house in Westbourne terrace could communicate through the partivasia with their next door neighbors. The only process by which visit of can eighbors. The only process by which visit of can eighbors. The only process by which visit of can eighbors. The only process by which visit of can eighbors. The only process have the cape the development, walking a total of 4,000 guests. A reference to the longuintial and transverse sections will explain her internal economy more readily than words. The series of sal

width is equally astonishing. From side to side of her holl she measures 33 feet, the width of Pall Mall; but across the paddle boxes her breadth is 114 feet—that is, she could just steam up Portland Place scraping with her paddles the houses on either side. With the exception of the sky-lights and openings for ventilating the lower saloons, her deck is flush fore and aft. However splendid this promenade might appear with respect to those of other ships, we question if it is at all too large for the moving town to whose use it is dedicated. Room must be found for the holiday strolling of between three and four thousand persons, whilst she is careering through the heated at mosphere of the tropics, and not merely for a few score blue nosed gentlemen, such as use the deck of the trans-Atlantic steamers for a severe exercising ground. The manner in which this moving city, rather than ship, will be propelled with the speed of a locomotive through the ocean, is not the least noticeable of the arrangements connected with her. Mr. Brunel has, we think wisely, decided not to trust so precious a human freight and so vast an amount of valuable cargo to any single propelling power, but has supplied her with three—the screw, the paddle and the sail. Her paddle wheels, 56 feet in diameter, or considerably larger than the circus at Astery's, will be propelled by four notines, the cylinders of which are 6 feet 2 inches in diameter, and the stroke 14 feet. The motive power of these will be generated by four boilers. Enormous as are these enagines, having a nominal power of 1,000 horses, and standing nearly 50 feet high, they will be far inferior to those devoted to the screw. These, the largest ever constructed for marine purposes, will be sapplied with steam by six boilers, working to a force of 1,000 horses—the real strength of the combined engines being equal to 3,000 horses. When the spectator looks upon the ponderous shaft of metal, 160 feet in length and 60 tons in weight, destined to move the screw, and 3,600 horses. When the spectator looks upon the ponderous shalt of metal, 160 feet in length and 60 tons in weight, destined to move the screw, and the screw itself of 24 feet in diameter, the four fans of which, as they lie on the ground, remind him of the bladebones of some huge animal of the pre-Adamite world, he better comprehends the gigantic nature of the labor to be done, and the ampie means taken to perform it. As the screw and the paddles will both be working at the same time, the ship will be pulled and pushed in its course like an invalid in a Bath chair, and each power will be called upon to do its best. The calculated speed of the ship under steam is expected to average from difteen to sixteen knots, or nearly twenty miles an hour. will be pulled and pushed in its course like an invalid in a Bath chair, and each power will be called upon to do its best. The calculated speed of the ship under steam is expected to average from fifteen to sixteen knots, or nearly twenty miles an hour. We all know, even on a calm day, what a wind meets the face looking out of a railway train going at that pace, and consequently it can be understood that sails, except on extraoreinary occasions, would act rather as an impediment than as an assistance to the ship's progress. It is not probable, therefore, that they will be much resorted to, except for the purpose of steadying or of helping to steer her. In case, however, of a strong wind arising, going more than twenty-live miles an hour in the direction of her course, she is provided with seven masts, two of which are square-rigged, and the whole spre ding 6,500 square yards of canvas. It will be observed by the diagram that she carries no bowspirt, and has no sprit sail. We do not know the reason of this departure from the ordinary rig, mnless it be to avoid her ploughing too deeply in the sea. Her bow is also without a figurehead; and this peculiarity, together with her simple rig, gives her the appearance of a child's toy boat. If locatly is nothing more than fitness, this form of bow is undoubtedly the most beautiful, and the Averican, who have long adopted it in their trans-Atlantic steamers, are right; but to ordinary eyes it looks saulty inferior to the old figurehead projecting out before the ship, as if eager to lead her onward over the wave. Fewer hands will oe required to navigate the Great Eastern than her size would seem to demand. Her whole arew will not exceed 400 men—a third of the number examposing the crew of a three decker. The difference is made up by what we may term steam salors. There will be four auxiliary engines appointed to do the heavy work of the ship, such as heaving the archive provided the readed to the provided to require to her ship, and the great highway of mations. The usuit

on limbs which toil day and night far out of sight a the deep hold, or as instantly to direct the helm so a the deep hold, or as instantly to direct the helm so a to alter the vessel's course.

The following diagrams gives an excellent idea of a length. A moment's consideration of these facts length to the conclusion that long ships must have a

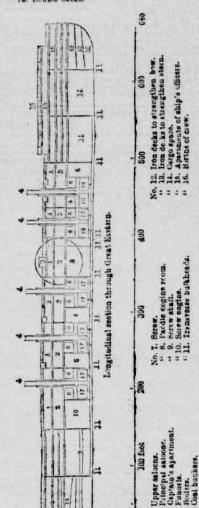
the monster steamer and the progressive increase in the size of ocean steamships since the Great West-ern, the pioneer:—



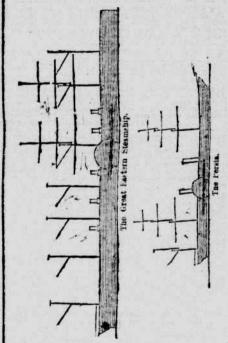
ES TO TRANSVERSE SECTIONS OF GREAT FASTERN

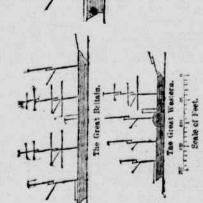
Upper schooms on main deck.
Priceipal salorn on lower deck.
Side onbins and but the.
Tunnes for steam and water pipes.
Better.
Coal bunkers.

7. Space between skins of ship.
8. Coal banker.
9. Skylight to principal salson.
10. Danble decks.



H0100 + 400





In most iron vessels great precautions are taken to avoid the incorrectness to which the needle placed on deck is liable on account of the proximity of attractive masses of metal. The commonest expedients to have placed high up in the mizenmast, beyond the influence of the iron sides of the ship, what is called a standard compass, and which may be said to realize Dibdin's "Sweet little cherub who sits up aloft and takes care of the life of poor Jack." In the Great Eastern, a special stage or framework will be erested for this dainty Artel, at least forty feet in height, and the belmsman will probably either read off the points from above as they appear through a transparent card lilmminated like a clock front, or the shadow of the trembling needle will be projected down a long pipe upon a card below, so as to avoid the necessity of the helmsman looking up, and to obviate the difficulty which would occur in foggy weather. The experiments with respect to this important adjunct to the ship are not yet concluded, however, and we must be considered to speak speculatively as to the plan which is likely to be adopted.

t The anchors of this mighty steamer would, with heir accessories, alone form the cargo of a good-sized ship. The tex anchors with which she will be

t The anchors of this mighty steamer would, with heir accessories, alone form the cargo of a good-sized ship. The ten anchors with which she will be fitted, together with their stocks, will weigh fifty-five tons. If we add to this ninety-eight tons for her eight bundied fathoms of chain-cable, and one hun-dred tons for her capstans and warps, we shall have a total weight of two hundred and fifty-three tons of material dedicated to the sole purpose of making fast the ship.

a total weight of two hundred and fifty-three tons of material dedicated to the sole purpose of making fast the ship.

It was prophesied that Mr. Brunel's first ship, the Great Western, would be doubled up as she rested upon the crests of the Atlantic waves, and we all know how the prophecy was fulfiled. When it was made, indeed, we were very much in the dark as to the size of ocean waves, and it was not until the introduction of long steamers that they could be measured with any accuracy. Dr. Scoresby, whilst cressing the Atlantic in one of the Cunard boats, some years since, closely observed the waves, and by means of the known length of the ship, was canabled to form a pretty accurate idea of their dimensions. The old vague account of their being "mountains high" was well known before that time to be an exaggeration; but we do not think even philosophers were prepared for the statement made by this observer at a meeting, some years since, of the English Association, that they averaged ne more than twenty feet in altitude and rarely exceeded twenty eight feet. The popular impression principally produced by marine painters that waves formed valleys thousands of yards across, down the sides of which ships slid as though they were about to be engulfed, seems to have been equally erroneous: as the maximum length of ocean waves, according to Dr. Scoresby, is six hundred feet, whilst in a mederate gaie they are only three hundred, and in a fresh sea about a hundred and twenty feet

great advantage over short ones with respect to the rapidity with which they make their jurney, as it is quite evident that whilst the latter have to perform their voyages by making a series of short curves—much to the impediment of their progress and to the discomfort of their lumates—the former, by ruling the waves with their commanding proportions, make shorter and smoother passages. As atseamers grow larger and larger the curse of seasickness must therefore gradually diminish. The Great Eastern, from her length and the bearing which she will have upon the water, being a paddle as well as a screw whip, will, in all probability, neither pitch nor roll, and will enterfore be most comfortable to the voyager. Her immense stride, if we may use the term, will enable her to take three of the three hundred feet waves of an Atlantic gale as easily as a racer would take a moderate sized brook. She will still have to encounter the six hundred feet waves of storms, and there may be those mistrusting her length and the great weight she will carry amidships, in the shape of engires and coal, who may be inclined to repeat with respect to her the prophecy which was made with respect to the Great Western. Mr. Brunel, by the method of launching which he intends to adopt, will, however, set these misgivings at rest before she even fauches the water. Although the total weight of the ship, together with her engines, which will be created in her whilst she is still on land, cannot be less than twelve thousand tons, she will rest entirely on two points as she enters the water broat-side on. No statement could give a more powerful idea of the strength of her fabric.

The reasons which have induced. Mr. Brunel to about this method of launching are given as follows in his report:—

I auchar g is generally effected by builting the ship on a builting that, which aware to the ship. In the power to the first would have seen on an average tenenty-two feet higher than it is a strength to the ship in the contract of the foreback of the reas

Thus the ocean going steamer of 1856 is nearly six times the length of that of 1825, whilst the difference between their tonnage is still more in favor of the last built vessel. The augmentation has gone on in an increasing ratio, and if it is still to continue, we wonder over what space of water our leviathan of 1870 will extend. As our commercial steam marine is in the hands of strewd men of basiness, it can well be imagined that the reasons for this progressive advance in size are sound. Steam

ness, it can well be imagined that the reasons for this progressive advance in size are sound. Steam shiptuilders are, in fact, only accommodating the tonnage of their vessels to the length of the voyages they have to perform, so that they may be enabled to carry their own coals over and above their dae proportion of cargo. This the Great Western did, and succeeded; this the various sorew steamers which have run the Australian voyage have not done, and consequently they have failed.

No one can fail to have observed that within these last two years steam, in long voyages, has apparently suffered a defeat. Clippers of all kinds, the Marco Polos, Red Jackets, and Morning Stars, seem to have recovered their own again, and in the race round the world, sails have distanced the paddle and the screw. When the question comes to be examined, however, it is clear that it is the want of steam that has caused the failure. Vessels, in short, as little fitted to make a passage of thirteen thousand miles, as the Sirius, though by a lucky accident it managed to cross the Atlantic at the same time as the Great Western, was to go a continuous stage of three thousand miles. They have all the expense of the new motive power without its full advantages, and, in consequence of their having to go out of their direct course to coal, they lose from twelve to twenty days on the passage. The tortoise in this instance has not fairly beaten the hare, because the latter has wilfully broken her leg.

Mr. Brunel, in constructing a ship of such large

the hare, because the latter has wilfully broken her leg.

Mr. Brunel, in constructing a ship of such large dimensions, is only doing for the long Eastern voyage what he did for the shorter Western one, namely, making her own coal bunkers the bank on which she can draw to any extent during her progress out and home, instead of employing from six to eight ships of 500 tons burthen each to carry fuel for her over half the globe, as the vessels at present running are obliged to do; a system which may be likened to the extravagance of a man who employs half-a-dozen porters to carry parcels, which, by propea management, he could manage to stow in his own knapsack.

The report of the directors for the year 1853 puts the calculation, with respect to her immense advantage, in carrying power so well, that we quote it entire:

In avoiding the delay of coaling on the voyage, your ships will also escape the great cost of taking cost at a foreign station. Coals obtained on the Iddian and Australian route, cost on the average, including waste and deteriors ion, four or five times as much per ton as in this country. But your ships will take their whole amount of coal for the voyage form near the pit's mouth, at a rate not exceeding for the best quality, 12a, to 14e, per ton. On the voyage of existing steam vessels to Australia or India and home, the country field.

Each of the company's ships will carry, besides their the coal field.

Each of the company's ships will carry, besides their

oost of which would supply 16 to 50,000 tors it taken on board at some port in immediate communication with the coal field.

Each of the company's ships will carry, besiles their own ceal, tpwards of 5,000 tons messurement of merchandire, and will have 800 cabins for passengers of the highest class, with smple space for troops and lower class passengers. These you will not only b) able to carry at rates much smaller than those by any existing steamships, but with an unprecedented amount of room, or more tand convenience.

In thus determining the rize of the ships, your directors believe that they are also obtaining the elements of a speed hereofore unknown; and if hereafter coal applicable to the purposes of steam can be supplied from the mires of Australis, the carrying capacity both for eargo and passengers will be propor ionably increased. The great length of these ships will undoubtedly, according to all present experience, enable them to pass through the water at a velocity of at least fifteen known an hour, with a smaller rower in proportion to their tomage than ordinally vessels now require to make ten knows. Speed is, in last, another result of great size. It is believed that by this reped, combined with the absence of stopages, the vegage between England and India, by the Cape, with the end of the combined with the lety-three dars, and between England and Australia to thirty-three or thirty-aix days.

It may be objected that the route he way of

It may be objected that the route by way of Egypt, now that the railway is in progress and a canal is projected, will prove a too powerful competitor for the traffic round the Cape; but independently of the meanvenience and tedfousness of embarking and then re-embarking, which will be fatal to versels containing such bulky cargoes as cumber the Australian steamers, it is asserted that the octan path is the direct route to the focus of Australian connection with Europe. Thus the naviga-

ble distances from Land's End to Port Philip are as follows:— Via the Cape of Good Hope.....

Cape Horn 182, Alexandria, Aden, Point de Galle, and Singapore, including transit through Egypt.

Panama, including transit across the 12,678

The General Association for the Australian colcules have indeed recommended for the mail time the overland route as far as Aden, and content to the content of the

Demolition of the Old United States Bank in Boston.

CONTENTS OF THE CORNER STONE.

[Fr m the Boston Journel, June 6]

This building, of late years occupied by the Merchants' Bank, has been for some days in process of demolition. The corner stone of the edifice was aid on the morning of Monday, July 5, 1824. Yesterday afternoon the massive granite pillar on the westerly corner of the building was removed, and a copper box, containing coins, newspapers, &c., taken from a cavity at the base. For a description of the contents of this box, which, we understand, will be unsealed this forenoon by the Directors of the Merchanis' Bank, we refer the reader to the following extract from the Evening Gazette of July 10, 1824:—

U. S. BANK.

The corner stone of the building erecting in this city

The corner stone of the building erecting in this city for the accommodation of the Office of Discount and for the accommodation of the Office of Discourt and Deposit of the Bank of the United States, was laid on Minday last, at half past eight o'clock, beneath which were placed the following deposits, viz :—

Enclosed in a g'as case, a silver plate, 10 inches by 7, weighing 11% ounces, with the following inscription:—

weighing 11% ounces, with the following inscription:

EANK OF THE UNITED STATES,
Incorporated by an Art of Congress, April 10th,
A. D. 1816:

James Macison then President of the United States.

Capital stock,
An Engle \$25,000,000;
standing or a portion of the Globe, in his beak, a cotoll, with the motto,
"E purious Unaum."

Cachier.

One glass case, containing copper coins eight cents, editage of 1821; six half do., coinage of 1801; two cents and 1788.

ediage of 1821; six half do., coinage of 1804; two cents of the Commonwealth of Massachusetts, coinage of 1787 and 1788.

One giass bottle, containing a copy of the act of Congress incorporating the Bank, and the several newspapers printed on the analysessery, viz :—Banton Daliy Accranities. Patriot and Daliy Mercanille Advertiser, Commercial Gezette, Courier and Stateman.

The articles were deposited in a carry of the stone (reventeen by thirteen inches, and seven deep), by Gandish Griene, Eag., and the stone plumbed and levelled by D. P. PARKER, Eag., Chairman of the Building Committee. The directors and efficers of the Bank, and many citizens, attended the ceremonles.

DIRECTORS FOR THE PERSINT YEAR.

Nicholas Biddle, Manuel Eyre, Joseph Hemphill, Calwillader Evans, Jr., —— Duront, Henry Eckford, John McKim, Joshua Lippineott, Daniel W. Cix, James Floyd, John Fotter, R. M. Whitney, Thomas Cadwallader, Samuel Wetherell, Benj. W. Crownionhield, Avander Heary, Dasiel C. Verplanck, Wim. Patterson, John Bohlen, Paul Beck, Jr., John A. Brown, Rawell L. Colt.

This building enected by the parent bank for the accommodation of its office of Discount and Deposit in this city of Biston, A. D. 1824.

Capital steek appropriated for the employment of this Branch, 1,500,000 dollars.

Whilam Gray, first President, resigned Nov. 8, 1823.

Directors of the Branch at this time.

Gardiner Greens, Thomas Handasyd Perkins, John Weiles, John Parker, Daniel Pinckney Parker, Nath'i Sibbee Divid Sears, Daniel Webster, Gaorge Blake, Resin Davis Shepherd, Henry Gardner Rice, Horace Gray,

Folkmon Willard, Architectus Etitletum Construction of the officer of Parker Rice, Horace Gray,

Folkmon Willard, Architectus Etitletum Construction of the State Resin Davis Shepherd, Henry Gardner Rice, Horace Gray,

Resin Davis Shepherd, Henry Gardner Rice, Horace Gray.
Fok won Willard, Architectus Etificium Construxit.
Vicat Respub Ica.

ON THE BACK OF THE PLATE.
This corner store, isld July 4, A. D. 1824, being the 48th subliversary of American Independence.
A glass case containing the following described medal, presented for the purpose by Mrs. F. H. Perkins, and gold and slaver coins of the United States, viz.:
Gold medal, weighing 10 dwts. with the following device:—On one side, bust of Washington, encircled by a surel wreath; an outer circle formed by the motto:—
"He is glory; the world in tears."
On the ether sifes an urn, with the initials G. W., outer

"He is in glory; the world in tears."
On the other side an urn, with the initials G. W., circ e, B. F. 11 1732 G.A. ARM. 75 R. 88 P. U. S. Izrer circ'e. B 96 G ARM US 98 O B D 14, 1796.
Gold coins—One eagle, coinage of 1891.
One half do. do. 1796.
One fourth do. do. 1796.
One half do. do. 1841.
One half do. do. 1841.
One dime, do. 1821.
One dime, do. 1821.
One half do. do. 1805.

At a meeting of the directors of the Merchants' Bark this morning, and in their presence, together with that of many of the oldest citizens, the box, which had been buried for thirty-two years, was opened, and all the contents were found to be in a

opened, and all the contents were found to be in a perfect condition.

From the original report of the directors of the United States Branch Bank, which was among the contents of the box, it appears that the appropriation for erecting the building was \$100,000, of which sum \$54,850 was paid for the land. The two pillars were delivered on the spot at a cost of \$900 each. The cootents of the box were collected and prepared by Col. Thomas H. Perkins. The whole will be redeposited, together with additional articles, under the corner stone of the new edifice.

Mis. Mary Bide, widow of the Hon. Wm. W. Bibb, the first Gevernor of Alabama, died at her residence in Dallas county, Alabama, on the 26th ult., in the 69th year of her age. She was a native of Georgia, and her maiden name was Freeman.

THE TRANSIT COMPANY.

Outline of the History of the Acces Transit Company, according to Sicaraguan Authority. TO THE EDITOR OF THE HERALD

The Reliton of the government of Nicaragus in relation to the Accessory Transit Company has been the fruitful subject of comment and speculation, and has given origin to a variety of opinions regarding its propriety. In the United States a natural feeing of surprise has been the result of the abilition of the company's charter. Not only has surprise been awakened, but an unmistakable only has turprise been awarded, as attended in the control of Nicara-gua should confront a giant monopoly, and expose its inequities, as a retributive example, to the world. A go-vernment struggling for a proud and emobiling existence -sirugging for the fraternal reorgation of independent nations—strugging for the permanence of a Pacific reign —notwithstanding the shadow and the wrong inflicted upon its prospects by the unjust example of the republic of America, and notwithstanding its reputed impotency as a State, unbestatingly vindicates its claim to recogni-tion and respect by an act of indubitable sovere'gnty. Regardless of the reputed wealth, the power and influence by which the inimical monopoly was sought to be sustained—regardless of the flattering inducements and the leving pron less with which it struggled to fortify its existence, and defiant of the menages which threatened the interraption of its security, the government of Nica-ragua, conscious of its rights, and in vindication of its

serve set to have juddy and moderate property and the segment varieties for an extract domination of the section of the sectio

raised by the sale of stock in creats in the enterprise. The avicance taken before the commissioners appointed by decree of this [Sicarsgaan] government, of Feb. 18, 1856, annulling the company's charter, exhibits a total failure on the part of the projectors of the enterprise to effect a transfer or profitable disposition of any, or a very isconsiderable, portion of the stock. This consideration, affected by the additional circums ances of the almost insuperable physical obstacles to the construction of the work, the failure to secure the fesired modification of the charter, the relinquishment of all action in relation to the project, and the enormous expenses incurred by the Trantit Company in the comp stion of the present route across the lathmus, render the scheme of the canal or reliroad if not absolutely chimerical, at least removed beyond the practicability of accomplishment within the time limited by the charter.

a The Accessory Transit Company, as already stated, was composed of the same individuals constituting the Schip Canal Company. Each held its authority from the government of Nicarsgua, and each owed similar allegiace to the granitap power. They sprang into existence by decretal sanction of the State, and in return for the prosecution of their privileges and the enjoyment of their right they assumed obligations and responsibilities which were designed, in their fulfilment, for the benefit of the State. The State had competent power to grant, and to exact as recompense for its concessions, the performance of stipulated cuties. It was a commonwaith, endowed with the attributes of sovereignty, and could determine by its own action the performance or non-performance of the conditions of a compact or covenant entered into as a government with individuals of a foreign formal constraints. The powers conferred by charter upon the Transit Company were limited in their operations within the boundaries of Nicaragua, over which the jurisdiction of the government necessarily extends. The controversy, theref